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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/728,272

12/03/2003

Takateru Satoh

02157/0200631-US0

7115

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02/22/2007

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EXAMINER

DAVIS, ROBERT B

ART UNIT

PAPER NUMBER

1722

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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2 MONTHS

02/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/728,272	<b>Applicant(s)</b> SATO ET AL.	
	<b>Examiner</b> Robert B. Davis	<b>Art Unit</b> 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2006.  
 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.  
     4a) Of the above claim(s) 10,11,15 and 16 is/are withdrawn from consideration.  
 5) ☒ Claim(s) 1-9 and 12-14 is/are allowed.  
 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☒ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/3/3</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I in the reply filed on December 5, 2006 is acknowledged. The traversal is on the ground(s) that the molding process of claims 1, 2 and 5 is suitable only for forming the flange claimed as part of claims 10, 11, 15 and 16. This is not found persuasive because article as claimed can be formed by a different apparatus wherein a hub with a flat surface is formed by an injection mold and a laser machining device which forms a tapered surface from the root to the circumferential end of the flange. The product claim is an attempt at a product-by-process claim. "Determination of patentability in 'product-by-process' claims is based on product itself, even though such claims are limited and defined by process, and thus product in such claim is unpatentable if it is same as, or obvious from, product of prior art, even if prior product was made by different process." In re Thorpe et al., 227 USPQ 964.

The requirement is still deemed proper and is therefore made FINAL.

### ***Allowable Subject Matter***

2. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art of record teach or suggest a molding mold for molding a flange configuration provided with a reel hub portion having a flange and a hub arranged at a substantial center of the flange, and an insert portion disposed at a substantial center of the reel hub portion at an opposite side of the hub, comprising: a stationary side mold, a movable side mold; and a cavity formed between the stationary

Art Unit: 1722

side and the movable side mold; the cavity, including: an insert attaching portion for attaching the insert portion by an insert molding; a flange forming portion for forming the flange; and a hub forming portion for forming the hub; wherein a molding surface at a side hub forming portion of the flange forming portion, a dimension of a circular area over from a root end of the hub forming portion to a substantially intermediate portion between the root end and a circumferential end of the flange forming portion, is corrected in view of deformation upon molding. The closest prior art (Japanese reference 2000-293967 A) discloses an inclined flange surface of a reel hub portion, but the reference fails to disclose or suggest correcting the dimensions of an injection mold intermediate the root end and circumferential end of a reel hub portion.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The remaining references illustrate the state of the art.
4. This application is in condition for allowance except for the following formal matters:

The presence of non-elected claims 10, 11, 15 and 16.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

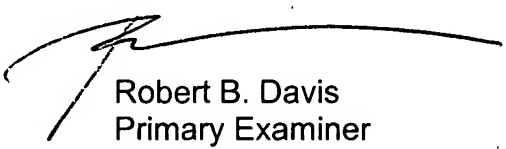
A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Art Unit: 1722

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Davis whose telephone number is 571-272-1129. The examiner can normally be reached on Monday-Friday 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Robert B. Davis  
Primary Examiner  
Art Unit 1722

2/20/07